

Application No.:10/643,790

Docket No.:JCLA10858

REMARKS**Present Status of the Application**

The Office Action rejected claims 1 under 35 U.S.C. 103(a), as being anticipated by Harrer et al. (U.S. 6,091,304) in view of Lansford et al (US 6,163,568). Claim 2 is rejected 35 U.S.C. 103(a), as being anticipated by Harrer et al. (U.S. 6,091,304) in view of Lansford et al (US 6,163,568) and further in view of Suto (US 20030052744). Claims 3-9 are rejected under 35 U.S.C. 103(a), as being anticipated by Harrer et al. (U.S. 6,091,304) in view of Lansford et al (US 6,163,568) and further in view of Suto (US 20030052744), Joshi et al.(US 5,650,754) and Bomba (US 3,962,640). Claims 1-9 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Office Action Rejections

Applicant respectfully traverses the rejection of claims 1 under 35 U.S.C. 103 (a) as being unpatentable over Harrer (U.S. 6,091,304) in view of Lansford et al (US 6,163,568) because a *prima facie case of obviousness* has not been established by the office action.

The Examiner alleged that Harrer had disclosed the switching varactor unit and the frequency-selection voltage of claim 1 of the instant case, and considered elements 32 and 33 in FIG. 3 of Harrer equivalent to the switching varactor unit of claim 1 of the instant case, and switching signals 303 and 304 in FIG. 3 of Harrer equivalent to the frequency-selection voltage of claim 1 of the instant case.

After a diligent study of Harrer, Applicants respectfully submit that switching signals 303 and 304 in FIG. 3 in fact are non-analogous to the frequency-selection voltage.

Application No.:10/643,790

Docket No.:JCLA10858

As stated in Claim 1 of the present invention, it specifically claims the switching varactor unit produces a **capacitance**, according to a **frequency-selection voltage**. On the contrary, Harrer does not either teach or imply the switching signals 303 and 304 are capable to control the capacitance. As a matter of fact, Harrer reveals the switching signals 303 and 304 are indeed to function something different other than controlling the capacitance. In Col 5, line 41-44 of Harrer, "In the illustrated embodiment, the switch S1 comprise a diode, which is open (non-conducting) when reverse-biased by the band select signals 303 and 304, and closed (conducting) when forward-biased by the same signals.", the said switching signals are designed so as to control whether the switch S1 is turned on or not as opposed to controlling the capacitance as suggested by the examiner. The intended function of the said frequency-selection-voltage of the present invention is distinctive from the said switching signals in Harrer. Thus, it conveys clearly that Harrer has yet to disclose a **switching varactor unit** capable to produce a capacitance as would otherwise an unique characteristics of the present invention.

With regards to dependent claim 2, which define the VCO device in claim 1, are patentable as well. Further, since claim 1 of the present invention satisfies the non-obviousness requirements under 35 U.S.C. 103 (a), Applicants respectfully assert that claim 3 relating to a frequency shift keying (FSK) system using the technical features of claim 1 is in condition for allowance, and the dependent claims 4-7, which further define the FSK system recited in claim 3, are also in condition for allowance. Moreover, since claim 8 defines a method for the VCO recited in claim 1 and claim 1 fulfills the non-obviousness requirements under 35 U.S.C. 103 (a), claim 8 likewise fulfills the non-obviousness requirements under 35 U.S.C. 103 (a), and so does its dependent claim 9.

Application No.:10/643,790

Docket No.:JCLA10858

Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

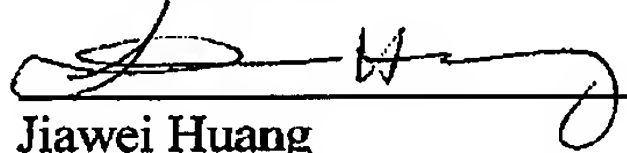
CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-9 are in proper condition for allowance and an action to such effect is solemnly assured. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is gratefully invited to call the undersigned.

Date: 5-8-2007

4 Venture, Suite 250
Irvine, CA 92618
Tel.: (949) 660-0761
Fax: (949)-660-0809

Respectfully submitted,
J.C. PATENTS


Jiawei Huang
Registration No. 43,330